|   | Application/Control  |             |              |         |          |   |          |                 |   |                 |            |          |              |                        |                         | A - N - M - MA |              |         |       |         |           |           |     |              |            |   |          |                     |  |               |           |        |          |   |
|---|--|-------------|--------------|---------|----------|---|----------|-----------------|---|-----------------|------------|----------|--------------|------------------------|-------------------------|----------------|--------------|---------|-------|---------|-----------|-----------|-----|--------------|------------|---|----------|---------------------|--|---------------|-----------|--------|----------|---|
|   | Index of Claims  |             |              |         |          |   |          |                 |   |                 |            |          |              |                        | Application/Control No. |                |              |         |       |         |           |           |     |              |            | Applicant(s)/Patent under Reexamination |          |                     |  |               |           |        |          |   |
|   | I I PROFES MENT BETEL TENT PROFES PRO |             |              |         |          |   |          |                 |   |                 |            |          |              |                        | 10/909 103              |                |              |         |       |         |           |           |     |              |            | KOYANAGI ET AL.                         |          |                     |  |               |           |        |          |   |
|   |  |             |              |         |          |   |          |                 |   |                 |            |          |              | 10/808,193<br>Examiner |                         |                |              |         |       |         |           |           |     |              | Art Unit   |   |          |                     |  |               |           |        |          |   |
|   | I HEREN BENEFANN EENEN HEREN EENEN HEREN TAN DE TEN HEREN EENEN HEREN HE |             |              |         |          |   |          |                 |   |                 |            |          |              |                        | Caridad M. Everhart     |                |              |         |       |         |           |           |     |              |            | 2891                                    |          |                     |  |               |           |        |          |   |
|   |  |             |              |         |          |   |          |                 |   |                 |            |          |              |                        | Validad IVI. Evellian   |                |              |         |       |         |           |           |     |              | 1 2031     |   |          |                     |  |               | -         |        |          |   |
|   | (Through numeral)  |             |              |         |          |   |          |                 |   |                 |            |          |              |                        | 1)                      | 7              | Γ            | Non-Ele |       |         |           |           | П   | AI           |            |   |          |                     |  |               |           |        |          |   |
| ✓ Rejected — (Through nume<br>Cancelled |  |             |              |         |          |   |          |                 |   |                 |            |          |              | _                      | ╛                       | 1              | V            | NOI     | 1-EI  | ec      | ·         |           |     | Appeal       |            |   |          |                     | ╛  |               |           |        |          |   |
|   |  |             | =            | Allowed |          |   |          |                 | + |                 | Restricted |          |              |                        | 1                       |                |              |         |       | inte    | erfe      | rei       | nce | ice          |            |   | Ob       | iec                 | ctec   | 1             | ı         |        |          |   |
| LL                                      |  |             |              |         |          |   |          |                 |   |                 |            |          |              |                        |                         |                |              |         |       |         |           |           |     | rence        |            |   |          |                     |  |               |           |        |          |   |
|   | Cla  | im          | L            |         | Date     |   |          |                 |   |                 |            |          | Claim        |                        |                         |                |              | Da      | ate   |         |           |           |     | CI           |            | -                                       |          | Date                |  |               |           |        |          |   |
|   | <u> </u>   | Original 15 |              |         |          |   |          |                 |   |                 |            | Γ.       | $\Box$       | - g                    |                         | T              |              |         |       |         |           |           |     | =            | Ē          |   |          |                     |  |               | 1         |        |          |   |
|   | Final  | Original    | 1            |         |          |   |          |                 |   |                 |            | ii<br>ia |              | Original               | ١                       |                | ı            | ı       | 1     |         |           |           |     | Finat        | Original   |   |          |                     |  |               | 1         |        |          |   |
|   | Ļ.,  | 1           | 数            | Щ       | Н        | _ | $\dashv$ |                 |   | Н               | 4          | $\vdash$ |              | 51                     | 4                       | 4              | +            | ╀       | +     | +       | ╀         | ╀         | ł   | ⊢            | 101        | $\vdash$                                | 4        | $\dashv$            | 4  | +             | +         | +      | ╀        |   |
|   | ピ  | 2           |              |         |          |   |          |                 |   |                 | ゴ          |          | $\Box$       | 52                     | ⇉                       | 士              | #            | 1       | 士     | $\pm$   | 土         | L         | į   |              | 102        | 口                                       |          |                     | #  | 士             | #         | 士      | 上        |   |
|   | _  | 3           | $\mathbb{H}$ | Н       | Н        | Ц |          |                 |   | Н               | 4          | $\vdash$ |              | 53<br>54               | 4                       | +              | +            | +       | +     | +       | ╀         | ╀╌        | ł   | <u> </u>     | 103        | $\vdash$                                | $\dashv$ | $\dashv$            | +  | +             | +         | +      | ╀        |   |
|   |  | 5           | Ì            |         |          |   |          |                 |   |                 | ╛          |          |              | 55                     | 士                       | ╛              | 士            | 1       | 1     | 土       |           | 上         | İ   |              | 105        | 口                                       |          |                     | 1  | 土             | 1         | 士      | 上        |   |
|   |  | 7           | Щ            |         | Н        | Щ | $\Box$   |                 |   | $\dashv$        | 4          | _        |              | 56<br>57               | 4                       | 4              | $\perp$      | 4       | 4     | +       | +         | -         | l   | -            | 106<br>107 | Н                                       | _        | _                   | 4  | $\bot$        | 4         | +      | -        | ļ |
|   | <del> </del>   | 8           | Н            |         | $\vdash$ |   |          |                 |   | H               | $\dashv$   |          |              | 58<br>58               | $\dashv$                | _              | $\dagger$    | +       | $\pm$ | $\pm$   | $\dagger$ |           |     |              | 108        |   | ᆸ        |                     | $\pm$  | $\top$        | $\dagger$ |        |          |   |
|   |  | 9           | F            |         | Н        | П | $\Box$   |                 |   |                 | $\exists$  |          |              | 59<br>50               | $\Box$                  | $\dashv$       | $\downarrow$ | $\bot$  | Ŧ     | $\perp$ | Ţ         | $\perp$   | ]   |              | 109<br>110 |   |          | $\Box$              | 4  | _             | 4         | $\bot$ | $\vdash$ |   |
|   | <del> </del>   | 10          | Н            | Н       | Н        | Н | Н        |                 |   | H               | ᅥ          | $\vdash$ |              | 60<br>61               | ┪                       | $\forall$      | +            | 十       | +     | +       | 十         | T         | l   | $\vdash$     | 111        | Н                                       | ᅥ        | 1                   | $\forall$  | 十             | +         | +      | +        |   |
|   |  | 12          | П            | П       | П        |   | П        |                 |   | $\Box$          | 4          |          |              | 62<br>63               | $\dashv$                | 7              | 4            | 7       | 1     | Ŧ       | Ŧ         | oxdapprox | ]   |              | 112<br>113 | П                                       | $\Box$   | $\dashv$            | $\dashv$   |               | Ŧ         | $\bot$ | F        |   |
|   | -  | 13<br>14    | +            | Н       | Н        | Н | Н        | Н               |   | Н               | $\dashv$   | -        |              | 64                     | $\dashv$                | +              | +            | ╁       | +     | +       | 十         | ╁         | ł   | $\vdash$     | 114        | Н                                       | $\dashv$ | $\dashv$            | 十  | ┰┼            | +         | ╅      | ╁        |   |
| •                                       |  | 15          |              | П       | П        | П | П        |                 |   | 耳               | $\Box$     |          | 1            | 65                     | 4                       | 7              | $\bot$       | #       | 1     | #       | T         | 1         | 1   |              | 115        | П                                       | $\Box$   | $\rightrightarrows$ | 4  | 1             | 1         | #      | I        | ļ |
|   | 7  | 16<br>17    | Н            | Н       | Н        | Н | Н        | Н               | _ | Н               | $\dashv$   | $\vdash$ |              | 66<br>67               | ┪                       | +              | +            | +       | ╫     | ╁       | ╁         | ╁╌        | ł   | -            | 116<br>117 | Н                                       | -        | $\dashv$            | $\dashv$   | +             | +         | +-     | ╁        |   |
|   |  | 18          |              | П       |          |   |          |                 |   |                 | コ          |          | 丁            | 68                     | $\exists$               | コ              | #            | 1       | #     | 1       | I         | T         | 1   |              | 118        | П                                       |          | $\Box$              | 긔  | 1             | 1         | 1      | L        |   |
|   | 1  | 19<br>20    | PH           | Н       | $\vdash$ | Н | Н        | Н               |   | Н               | -1         | $\vdash$ |              | 69<br>70               | +                       | +              | ╁            | +       | +     | ╀       | ╁         | ╀         | ł   |              | 119<br>120 | Н                                       | $\dashv$ | $\dashv$            | +  | +             | +         | +      | ╀        | i |
|   |  | 21          | Ш            |         |          |   |          |                 |   |                 | コ          |          |              | 71                     | $\exists$               | #              | #            | 1       | I     | #       | 丰         | T         | 1   |              | 121        | П                                       |          | $\Box$              | コ  | $\Rightarrow$ | #         | T      | 丰        |   |
|   |  | 22          | J            | H       | Н        | Н | Н        | Н               | _ | Н               | $\dashv$   | $\vdash$ |              | 72<br>73               | $\dashv$                | +              | ╁            | +       | +     | +       | +         | ╀         | ł   | <del> </del> | 122<br>123 | $\vdash$                                | -        | -                   | ┿  | +             | +         | +      | +        |   |
|   | C  | 24          |              | Ш       |          | П |          |                 |   |                 | コ          |          | T            | 74                     | $\sqsupset$             | 7              | コ            | 1       | 1     | $\perp$ | 1         | 丰         | 1   |              | 124        | $\Box$                                  |          | $\sqsupset$         | コ  | コ             | #         | 丁      | L        |   |
|   | $\leq$   | 25<br>26    |              | -       | Н        | Н | Н        | Н               | _ | Н               | $\dashv$   | $\vdash$ |              | 75<br>76               | $\dashv$                | $\dashv$       | ┿            | ┽       | ╬     | +       | ╁         | ╁         | ł   | -            | 125<br>126 | Н                                       | -        | $\dashv$            | +  | +             | ╁         | ╫      | ╀        |   |
|   |  | 27          |              |         | $\Box$   |   |          |                 |   |                 | コ          |          | T.           | 77                     |                         | ゴ              | #            | 1       | 1     | #       | 1         |           | 1   |              | 127        | 口                                       |          | $\Box$              | コ  | ユ             | #         | 丰      | 上        |   |
|   |  | 28<br>29    | Н            | Н       | Н        | Н | _        | Н               |   | Н               | $\dashv$   | $\vdash$ |              | 78<br>79               | $\dashv$                | +              | -+           | +       | ╬     | +       | ╀         | ┿         | {   | -            | 128<br>129 | Н                                       | $\dashv$ | $\vdash$            | +  | +             | +         | +      | ╁        |   |
|   |  | 30          |              | П       |          |   |          |                 |   |                 | ゴ          | E        |              | 80                     | ╛                       | 1              | 士            | 士       | 土     | 1       | 土         |           | 1   |              | 130        |   |          |                     | 士  | 土             | 土         | 土      | L        |   |
|   |  | 31          | Н            | Н       | Н        | Н | Н        | Н               | _ | $\dashv$        | 4          | $\vdash$ |              | 81<br>82               | $\dashv$                | +              | +            | +       | +     | +       | ╀         | ╄         | ┨   |              | 131        | $\vdash$                                | _        | $\dashv$            | +  | +             | +         |        | ╀        |   |
|   |  | 33          |              |         |          |   |          |                 |   |                 | $\exists$  | E        |              | 83                     | ╛                       | 1              | 1            | 士       | $\pm$ | 1       | $\pm$     | L         | •   |              | 133        |   |          |                     | 士  | 士             | 1         |        | t        |   |
|   |  | 34<br>35    |              |         |          | П |          | Н               |   | П               | 7          |          | 4            | 84<br>85               | 4                       | 4              | 4            | 4       | 7     | +       | +         | +         |     |              | 134<br>135 |   |          | $\vdash$            | 4  | -             | 4         | _      | F        | ļ |
|   |  | 36          |              | Н       | Н        | H | Н        |                 |   | Н               | $\exists$  |          | _            | 86                     | _                       | 1              | 1            | +       | +     | +       | 十         | +         | 1   | ┢            | 136        |   |          |                     | +  | 士.            | 1         | 1      | 士        | j |
|   | _  | 37          |              |         |          | Н | П        | П               |   | $\Box$          | $\exists$  |          |              | 87                     | $\dashv$                | $\dashv$       | $\dashv$     | $\bot$  | Ţ     | Ŧ       | Ţ         | F         | 1   |              | 137        | $\Box$                                  |          | $\Box$              | $\dashv$   | 4             | 7         | 1      | $\bot$   | } |
|   |  | 38<br>39    | Н            | Н       | Н        | Н |          | Н               | Н | $\vdash$        | $\dashv$   | $\vdash$ |              | 88<br>89               | $\dashv$                | $\dashv$       | +            | 十       | ┿     | ┿       | ╁         | ╁         | ┨   |              | 138<br>139 | H                                       |          | $\dashv$            | ┪  | +             | +         | +      | ╁        | İ |
|   |  | 40          |              | П       | П        |   |          | П               |   |                 | $\exists$  |          |              | 90                     | $\Box$                  | $\Box$         | 1            | 7       | T     | $\top$  | 1         | 丰         | 1   |              | 140        |   |          | $\Box$              | 7  | 4             | 7         | #      | T        |   |
|   | <del>                                     </del>   | 41          | Н            | Н       | Н        | Н | Н        | Н               | H | $\dashv$        | $\dashv$   | $\vdash$ |              | 91<br>92               | $\dashv$                | $\dashv$       | 十            | +       | +     | +       | +         | ╁         | ┨   | <u> </u>     | 141        |   | $\dashv$ | ${\mathbb H}$       | +  | +             | +         | 十      | +        |   |
| •                                       |  | 43          | 口            |         |          | 口 |          |                 |   | 耳               | ゴ          |          | $\Box$       | 93                     | $\rightrightarrows$     | $\Box$         | 丰            | 1       | #     | 丰       | #         | 1         | 1   |              | 143        |   |          | $\Box$              | #  | 丰             | #         | #      | $\bot$   | 1 |
|   | <u> </u>   | 44          | Н            | Н       | Н        | Н | Н        | Н               | Н | $\vdash \vdash$ | $\dashv$   | $\vdash$ |              | 94<br>95               | $\dashv$                | +              | +            | +       | +     | +       | ╀         | +-        | 1   | $\vdash$     | 144        |   | $\dashv$ | dash                | +  | +             | +         | +      | +        | 1 |
|   |  | 46          |              |         |          |   |          |                 |   |                 |            |          |              | 96                     | 士                       | 士              | 士            | 士       | #     | 土       | 士         | 上         | 1   |              | 146        |   |          | ◨                   | コ  | #             | 士         | 土      | İ        | į |
|   |  | 47<br>48    | $\square$    | Ц       | Н        | H | Н        | $\vdash \vdash$ |   | $\dashv$        |            | $\vdash$ | _            | 97<br>98               | 4                       | $\dashv$       | +            | +       | 1     | $\bot$  | +         | 丰         | -   | <u> </u>     | 147        |   | $\dashv$ | H                   | $\dashv$   | 4             | +         | +      | +        | 1 |
|   |  | 49          |              | $\Box$  | $\Box$   |   |          | Н               |   |                 | $\exists$  |          | ⇉            | 99                     | 士                       | 士              | 士            | 士       | 士     | 士       | 士         | 士         | 1   |              | 149        |   |          | $\Box$              | _  | 士             | 士         | $\pm$  | 士        | 1 |
|   |  | 50          |              |         |          |   |          |                 |   | Ш               |            |          | $\mathbf{I}$ | 100                    | $\Box$                  | $\Box$         | $\perp$      | $\perp$ | T     | I       | Ι         | Γ         | ]   |              | 150        | П                                       |          |                     | $oldsymbol{ol}}}}}}}}}}}}}}$ | $\perp$       | $\perp$   | $\Box$ |          | J |